DOCUMENT RESUME

ED 138 006

EC 100 555

AUTHOR TITLE

Michael, John A.

Summer 1975 Program for Language and Hearing Impaired

Children. Evaluation Period July 1 - August 8,

1975.

INSTITUTION

New York City Board of Education, Brooklyn, N.Y.

Office of Educational Evaluation.

SPONS AGENCY

Bureau of Elementary and Secondary Education

(DHEW/OE), Washington, D.C.

PUB DATE NOTE

75 34p.

EDRS PRICE DESCRIPTORS MF-\$0.83 HC-\$2.06 Plus Postage.

*Aurally Handicapped; Educational Objectives; Elementary Secondary Education; Exceptional Child Research; *Language Handicapped; *Mathematics; *Program Evaluation; *Reading; *Summer Programs

ABSTRACT

A summer program was designed to provide math and reading instruction based on common and enriching experiences for 125 language and hearing impaired students (5-14 years old). The program was evaluated along three objectives: the mastery of at least one instructional objective by 70% of program participants; the extent to which students demonstrated mastery of instructional objectives; and the extent to which the program coincided with the project proposal. Pindings indicated that 70% of the students did master at least one instructional objective during the program; that considerable diversity in the preparedness to learn, as well as the amount of learning that actually took place, was demonstrated; and that there were no significant departures from the program design. (Included are sample information forms and tables with statistical data.) (SBH)

***************** Documents acquired by ERIC include many informal unpublished * materials not available from other sources. ERIC makes every effort * to obtain the best copy available. Nevertheless, items of marginal * reproducibility are often encountered and this affects the quality * of the microfiche and hardcopy reproductions ERIC makes available * via the ERIC Document Reproduction Service (EDRS). EDRS is not st responsible for the quality of the original document. Reproductions st* supplied by FDRS are the best that can be made from the original. ************************ THIS DOCUMENT HAS BEEN REPRO-LICED FRACTLY AS RECEIVED FROM THE PERSON OR OF ANY ATTOM ORIGIN-THE PERSON OR OF A VIEW OR OPINIONS AS NOT 1905 FOR EXAMPLY REPRE-TATED DO NOT SECUSARILY REPRE-SENTORICAL MATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

B/E #09-61606

Summer 1975 Program for Language and Hearing Impaired Children

> Evaluation Period July 1 - August 8, 1975

The ERIC Facility has assigned this document for processing to

to La our judgement, this document is also of interest to the clearing-houses noted to the right, Indexing should reflect their special points of view.

SCOPE OF INTEREST NOTICE

Gonsultant/Evaluator - Dr. John A. Michael

An evaluation of a New York City School district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the Summer 1975.

2

Dr. Anthony J. Polemeni, Director



BOARD OF COUCATION OF THE CITY OF NEW YORK OFFICE OF EDUCATIONAL EVALUATION 110 LIVINGSTON STREET, BROOKLYN, N. Y. 11201

ERIC

Full Text Provided by ERIC

56100555

j

TABLE OF CONTENTS

| | | Page |
|---------|---|------------------|
| Chapter | I. Program Description Program Objective | . 1 |
| Chapter | <pre>II. Evaluation Procedures Evaluation Objective #1</pre> | 2 2 |
| | Subjects Methods and Procedures Time Schedule Data Analysis | 2 2 2 3 |
| | Evaluation Objective #2 | 3 |
| | Subjects Methods and Procedures Time Schedule Data Analysis | 3 3 3 3 |
| | Evaluation Objective #3 | 4 |
| Chapter | III. Findings Objective #1 | 4 |
| | Objective #2 | 4 |
| | Data Limitations Affective Outcomes Program Adequacy Prior Recommendation | 8 8 8 9 |
| | Objective #3 | 9 |
| Chapter | iV. Summary of Major Findings, Conclusions, and Recommendations | 11 |
| | Summary | . 11 |
| | Conclusion | 12 |
| | Recommendations | 12 |

Contd.



Appendixes

Mailed Information Report (MIR) Data Loss Form

LIST OF TABLES

| | | Pago |
|-----------|--|------|
| Table "A" | Distribution of pupil non-mastery on pretest and no post-test follow-up | 14 |
| Table "B" | Distribution of pupil mastery of instructional objectives prior to instruction | 14 |
| Table "C" | Distribution of pupil mastery by instructional objectives as a result of instruction | 15 |
| Table "D" | Distribution of the number of instructional objectives mastered after instruction | 16 |
| Table "E" | Distribution of the percentage of pupils achieving various levels of mastery or instructional objectives | 16 |

SUMMER PROGRAM FOR LANGUAGE AND HEARING IMPAIRED CHILDREN

Chapter I. PROGRAM DESCRIPTION

This project was designed to provide a program of math and reading instruction based on common and enriching experiences, for language and hearing impaired children ages 5-14.

The project population was composed of students 5 to 14 years of age, afflicted with a receptive and/or expressive language dysfunction who are below grade in mathematics and reading. All children are currently enrolled in various centers of the School for Language and Hearing Impaired Children. The instructional staff came from the same centers. A teacher in charge, assisted by a general assistant-audiologist, organized the program, planned orientation sessions and supervised all aspects of the program which employed 13 teachers, 5 paraprofessionals and one secretary.

Approximately 450 students of the School for Language and Hearing Impaired Children fall into the age and disability category for this program. It was estimated that approximately 110 of these students would register for the program; 125 attended. The program operated for 28 days beginning July 1, 1975. Children were in attendance from 8:30-12:30 on class days.

All class sessions were organized according to type of language disability, chronological age and social maturity. Classes were departmental. Each teacher worked with four classes daily.

Program Objective: To help pupils achieve mastery of instructional objectives in reading and mathematics which they fail prior to instruction as measured by the CROFT (Reading) and BASE (Mathematics) Criterion Referenced Tests.



Chapter II. EVALUATIVE PROCEDURES

Evaluation Objective #1: To determine if, as a result of participation in the program, 70 percent of the pupils master at least one instructional objective which prior to the program they did not master.

Subjects: All participants in the program.

Methods and Procedures: Using school records and teacher evaluation as levelers, all participants were administered, as a pretest, selected criterion-referenced tests from the CROFT (Reading) and BASE (Math) to ascertain each instructional objective diagnosed as requiring remediation (as determined by pretest failure). A post-test was administered on an individual basis after an appropriate interval of instruction. For each instructional objective, results of passing and failing on the pretest and the post-test were recorded on the Class Evaluation Record (CER).

Time Schedule: Some pretests were administered at the begining of the program while ensuing pretests were administered later during the program as appropriate; the post-test at intervals throughout the life of the program.

^{*/} The rerms "pretest" and "post-test" when used in the context of an evaluation based upon a criterion-referenced instrument are interchangeable with the terms "entry" test and "mastery" test.

Data Analysis: Data are analyzed and presented in tabular form ascertaining the percentage of participants demonstrating mastery or non-mastery of each instructional objective (according to SED classification system) at initial testing, and final testing.

Evaluation Objective #2: To determine, as a result of participation in the program, the extent to which pupils demonstrate mastery of instructional objectives.

Subjects: Same as above.

Methods and Procedures: Same as above.

Time Schedule: Same as above.

<u>Data Analysis</u>: Data are analyzed and presented in narrative and tabular form to ascertain each of the following. The tables are appended.

- A) The distribution of pupils failing to demonstrate mastery prior to instruction and not receiving sufficient instruction to receive the post-test.
- B) The distribution of pupils demonstrating mastery of objectives prior to instruction.
- C) The distribution of pupil mastery as a result of instruction by instructional objectives.
- D) The distribution of the number of objectives mastered as a result of instruction.



E) The distribution of percentage of pupils achieving rious levels of mastery of instructional objective.

Evaluation Objective #3: To determine the extent to which the program, as actually carried out, coincided with the program as described in the Project Proposal.

Chapter III. Findings

Objective #1: Did 70 percent of the pupils master at least one instructional objective during the program? Table "D" (appended) presents evidence in the affirmative. Over half (55%) of the pupils mastered one or more objectives in reading. The comparable statistic for math is 70%. Thus the objective was attained by the achievement in math alone. Furthermore many pupils exceeded the one-item objective; 26% and 16% in reading and math respectively attained three or more instructional objectives.

Objective #2: To what extent did pupils demonstrate mastery of instructional objectives as a result of participation in the program? Addressing this question with evidence beyond that already presented, we need to consider evidence on several issues:

- (a) to what extent did a demonstrated lack of mastery continue unchanged chroughout the program?
- (b) to what extent did the program dwell on familiar territory on which pupils had already gained mastery?
- (c) to what extent were the gains in learning patterned by subject matter?
- and (d) to what extent were pupils likely to succeed in mastering the objectives they undertook?



Now for the evidence.

(a) The extent of unattained objectives. Table "A" shows how many instructional objectives initially unmastered remained without a post-test by summer's end. According to the evidence, for most students the program ended with a few objectives still unattained.

In reading, roughly a quarter (27%) of the pupils at summer's end had yet to receive a post-test on 3 or 4 reading objectives which has been failed initially. Nearly half the student body (47%) had yet to be post-tested on 1 or 2 reading objectives which had been failed initially. The remaining quarter (26%) of the pupils in the program successfully completed a post-test for all objectives which had been failed initially, leaving none unmastered.

In math, 22% of the pupils had no post-test follow-up recorded on 3 or more non-mastery items. Nearly half the student body (45%) had no follow-up on 1 or 2 items not mastered initially. Finally the remainder of the student body (33%) successfully completed a post-test for all objectives which had been failed initially, leaving none unmastered.

Several observations clarify the data. For one thing, the program personnel attempted to give children a sense of accomplishment through the attainment of as many unmastered instructional objectives as possible. Hence the low number of unattained objectives. However, in many cases, though non-mastery was demonstrated on test items and recorded on the child's record, little instruction was given on these objectives. This is because teachers frequently ascertained non-mastery on an array of instructional objectives during the first few days of the summer session before deciding on which efforts would be concentrated. Because of the short duration of the program, a number of identified instructional needs therefore went unattended. The summer's records would prove useful to planning instruction during the



regular school year, and serve to heighten continuity between the summer and winter programs.

In some ways, the program's organization made it difficult to cradicate all pretest failure. Teachers involved pupils in a variety of activities to make the summer program "fun" for handicapped children who must attend school for the summer. Also the departmentalization of instruction served to diversify instructional activities and objectives. Accordingly learning advanced simultaneously on many fronts, observation suggests, but, the amount of progress was sometimes apparently insufficient to warrant a post-test.

(b) The extent of fresh instructional objectives. Table "B" shows how often pupils demonstrated mastery prior to the program, expressed as a percentage of all pretests attempts. In both reading and math, students fared quite variously. In reading, for example, roughly a fifth (22%) of the pupils showed correctly on nearly all instructional items during the pretest. By contrast another two-fifths (40%) of those in the program failed the great bulk of pretest items. The remaining (38%) students demonstrated mastery prior to instruction between 26 and 75 percent of the time.

In math, a slightly larger percentage (30%) of the pupils scored correctly on the great bulk of instructional items during the pretest. Also, only 20% of those in the program failed the great preponderance of math items when tested initially. The remaining half of the student body demonstrated mastery before instruction ranging between 26 and 75 percent of the time.

Thus the student body, handicapped in language, showed less proficiency in reading than in math. At the same time considerable heterogenity exists on both counts. For the great majority, the summer program was not a reiteration of previously mastered curriculum.



- (c) Variability in learning by subject matter. Table "C" presents the distribution of pupil mastery by instructional objective. At least 70% of the pupils in the program demonstrated mastery by summer's end in a third (30%) of the instructional objectives undertaken. In a little more than half, (54%) of the instructional objectives undertaken, a majority of youngsters demonstrated mastery by summer's end. By contrast, in a quarter of the instructional objectives (25%), fewer than 10% of the pupils demonstrated mastery. Note that very few children had undertaken the objectives seldom achieved. The statistic in these cases does not necessarily reflect anything about the inherent difficulty of that particular task for the student body. Also, teachers concentrated their instructional efforts on the objectives most frequently not mastered at the program's onset.
- (d) The likelihood of scholastic achievement. Table "E" shows the number of instructional objectives each child mastered as a percentage of all objectives he/she undertook during the summer program. In both reading and math, the student body demonstrated diverse rates of success. In reading, for example, a seventh (14%) mastered 90-100% of the objectives they attempted. Nearly half (48%) mastered at least 50% of the objectives undertaken. By contrast another 45% mastered less than 10% of the reading objectives undertaken during the summer program.

Similarly in math, a fifth (20%) of the pupils mastered 90-100% of the objectives they attempted. Half (51%) of student body mastered at least 50% of the objectives undertaken. Yet a third (31%) mastered less than 10% of the objectives undertaken. In short, the program netted academic achievement for the majority of pupils in attendance, though some more than others.

The results in Table "E" understate the amount of achievement actually attained. The presumption that non-mastery on a pretest was followed by instruction relevant to that objective is not always warranted, as earlier



B/E

text has described. All items of demonstrated non-mastery or enter the denominator of the statistic presented in Table "E'' depress the data below the true rate of achievement.

-8-

<u>Data Limitations</u>: While 125 pupils enrolled in and atterprogram, eight pupils were absent more than three out of everdays. These few have been eliminated from the evaluation.

One further limitation of this evaluation should be clardesign of the study is such that it does not allow a firm as a causality, as might be implied by the title of Table "D". By tion, a number of influences extrinsic to the program (e.g., development) may account for the learning increments observed research design does not control.

Affective Outcomes: Throughout the program, the staff and sentiments into account when identifying and pursuing in tives. As a result children appeared to enjoy their summer the most part, school notwithstanding. Though the chief objective outcomes observed the record by virtue of their impact on program enrollees we return to school in the Fall ready to learn. Presumably, she outcomes engender significant long-run consequences on continued overlopment.

Program Adequacy: The program materials and facilities

program were adequate. The staff seemed impressively hard-w
thoughtful about its professional calling. On the basis of
supplied above and on-the-scene observations, the program is
needs of the specific target population for which it was des
crucial for deciding whether to continue the program, since



the children's families included--are limited in their ability to meet the special needs of 'is population.)

It should be noted that the program proceeded without first establishing each child's deficiencies in the perceptual motor areas, e.g., audiological and visual deficiencies. The availability of diagnostic information would sharpen the programs's thrust, to the extent that diagnoses guide instructional decisions and treatment.

Prior Recommendation

The prior evaluation recommended the extension of the concept of experientially based learning activities from mathematics to the program's curriculum generally. This was accomplished principally with the extension into reading.

Objective #3: To what extent did the actual program coincide with the proposal design? While there were no significant departures from the program design, several minor variations can be mentioned. Also some difficulties in implementing the design will be described below.

The program design stipulates the use of the results of a Title I citywide test as a "leveler", i.e., the basis for grouping children into instructional groups. While pupils in the program were administered such a test in
May, the results were not available at the program's outset. Consequently,
classroom assignments were based on school records and teachers' judgments.
This method is appropriate for the design requirement that classes be organized
on the basis of language disability, chronological age, and social maturity.



In constructing Table "A", the heading required by the design ("Number of Instructional Objectives Failed") was amended slightly by adding "Without Follow-Up". The purpose is to emphasize the statistic's reference not to pretest failure alone, but to pretest failure without a post-test follow-up. If the statistic were seen as referring to pretest failure alone, the "none" entry would then be regarded as an illogical configuration of pupils with no pretest failures and no post-test follow-up. Instead the "none" entry shows the number (and proportion) of pupils who were post-tested on all the instructional objectives which they had failed initially.

Finally, several minor difficulties in test administration and data collection were incurred by the shift to a new type of test, i.e., criterion referenced testing. For one thing, method of recording post-test results used by the program departed somewhat from the official Class Evaluation Record schema, in that no symbol was used to signify post-test failure. Thus an "E" on the program's records might reflect either no post-test or post-test failure. The effect of this recording error upon the data is to understate the apparent amount of instruction taking place during the summer in Table "A".

Some confusion resulted from the adoption of a new type of test.

Teachers and the program coordinator struggled with the tendency of criterionreferenced tests to direct the path of instruction, rather than adopting testitems to fit a preconceived course of instruction. Maintaining a new recording
system on a daily basis throughout the program's duration constituted a sizeable clerical burden, especially for teachers who individuate their instructional objectives. Moreover the program's organization on a departmental basis
compounded the clerical efforts required by teachers, since they had to establish

instructional objectives for not one but four different classrooms. (Tests were selected long after departmental organization had been elected.)

Finally the evaluator did not participate in the initial orientation to the new tests and their administration. Consequently he provided minimal asisstance to the program coordinator and teachers when questions about the initial guidance arose.

Many of these difficulties would be minimized by a careful review of testing materials and the proposed recording schema by the evaluator and program administrator in pre-program conferences.

Chapter IV. SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS Summary

The summer program serves a population which generally has few, if any, options for development-conducive activities during the summer. Thus both cognitive and affective outcomes of the program are important to monitor.

As for cognitive growth, the program attached its first objective, with as many children achieving mastery on a mathematical objective alone as was expected of the entire program. Considerable diversity in the student body's preparedness to learn was demonstrated, as well as in the amount of learning that actually took place. Differences in both preparedness and learning were pronounced in mathematics and attenuated in reading, as would be anticipated on the basis of pupils' handicaps.

While attitudinal data were not collected systematically, observations suggest that the large majority of pupils enjoyed the summer's activities. This in turn will likely increase their willingness to learn upon return to school in the Fall.



The program was instituted as written, with but minor exception. However, the adoption of criterion referenced testing complicated both the program's implementation and its evaluation.

Conclusion

The data give the clear impression that this program facilitates the cognitive growth of handicapped youngsters, even in those areas most impacted by their handicaps.

Second, criterion referenced testing proves to be an integral part of the program, not an extrinsic appendage. Testing decisions with programmatic implications need thorough consideration before a program begins.

Recommendations

The program should definitely be continued. This recommendation is made on the basis of the demonstrated progress of students during the summer and on the basis of the lack of meaningful summertime options open to this population. The costs of this program are small compared to the long-run costs that would be exacted by failing to develop the economic potential of this handicapped population.

As for program evaluation, the test should be selected in conjunction with the development of other program components. Where a new mode of testing is adopted, as in the present instance, the evaluator should participate in pre-program conferences and workshops on test administration, so as to assist the coordinator and other program personnel in the design and performance of their test-administration responsibilities.

Because children in the summer program attend the same school due ng the winter, issues of continuity arise that should be studied. For one thing, the use of the same criterion referenced test during the summer and winter



(previded that an acceptable test were available) would facilitate continuity in planning a child's instruction. For another example, the incorporation into the summer program of specialists at gauging children's deficiencies in the perceptual motor areas would provide diagnoses and prescriptions for some of the school's more severely handicapped youth which could be used by staff year-round. This diagnostic-prescriptive component would be an addition to the existing approach of an activity/experiential program to achieve mastery of specific objectives in the areas of reading and math. A proper experimental design should be devised to gauge the impact of the extra component.



TABLE "A"

DISTRIBUTION OF PUPIL NON-MASTERY ON PRETEST AND NO POST-TEST FOLLOW-UP

| Number of Instructional Objectives Without Follow-Up | Number of Pupils | Percentage of Pupils |
|---|------------------------------------|---|
| Reading: 3-4 1-2 none | 32 55 30 117 | 27 47 26 <u>1</u> 00 |
| Math: 11-12 9-10 7-8 5-6 3-4 1-2 none | 4 1 0 6 15 52 39 | 3 1 0 5 13 45 45 33 100 |

TAPLE "B"

DICTRIBUTION OF PUPIL MACTERY OF INSTRUCTIONAL BEJECTIVES FRIOR TO INSTRUCTION

| Percentage of Mastery of Instructional Objectives | Number of Pupils | Percentage of Pupils |
|--|--|-----------------------------|
| Reading: 76-100% 51- 75% 26- 50% 0- 25% | 26 26 19 <u>46</u> 117 | 22 22 16 40 100 |
| Math: 76-100% 51- 75% 26- 50% 0- 25% | $ \begin{array}{r} 35 \\ 39 \\ 20 \\ -\frac{23}{117} \end{array} $ | 30 33 17 20 100 |

TABLE "C"

DISTRIBUTION OF PUPIL MASTERY BY INSTRUCTIONAL OBJECTIVE AS A RESULT OF INSTRUCTION

| Instructional Objective | Ratio of # pupils schicking mestery # pupils attending mastery | Percentage of Mactory |
|-------------------------|--|-----------------------|
| Math: | | |
| 1101 | 9/16 | <i>5</i> 6 |
| 1102 | 7/ 23 ' | 3 0 |
| 1103 | 11/12 | 92 |
| 1104 | 8/11 | 73 |
| 1105 | 12/15 | દંઇ |
| 1106 | 9/11 | 82 |
| 1107 | 1/6 | 17 |
| 1108 | 2/ 9 | 22 |
| 1109 | 7/10 | 70 |
| 1110 | 8/13 | 62 |
| 1111 | 9/16 | . 56 |
| 1112 | ó / 8 | 0 |
| 1113 | 4/1.2 | 33 |
| 1114 | 0/ 6 | ō |
| 1115 | 0/ /3 | 0 |
| 1116 | 0/ 0 | 0 |
| 1117 | 0/5 | . 0 |
| 1201 | 8/ 9 | 89 |
| 1202 | 9/ 15 | . 60 |
| 1301 | 0/4 | 0 |
| 1 302 | 8/1.6 | 50 |
| 1 30 3 | 5/14 | 36 |
| 1304 | 2/ 17 | 12 |
| 13.05 | 0/2 | 0 |
| 1401 | 15/ 37 | 41 |
| 1402 | 4/ 12 | 3 3 |
| 1601 | 0/3 | 0 |
| 1602 | 2/1 L | 22 |
| 1801 | 5/ 25 | 20 |
| 1901 | 4/3 | 50 |
| Reading: | 28// | 43 |
| 2101. | 28/46 | 61 |
| 2102 | 30/59 | 5 1 |
| 2103 | 30/59 9/30 4/5 | 30 80 |
| 2104 | 4D | 0 |
| 2105 2401 | 0 / 2 37/ 58 | 64 |
| 2401 2402 | 37/38 0/8 | 0 |
| 2402 2403 | 24/58 | 41 |
| 2404 | 34/ 53 | 64 |
| 2404 | 7 (17) | 4 |
| 2405 2406 | 1/27 1/1 | 100 |
| 2400 | 4/ J | 100 |



TABLE "D"

DISTRIBUTION OF THE NUMBER OF INSTRUCTIONAL OBJECTIVES MASTERED AFTER INSTRUCTION

| Number of instructional objectives Mistored | Number of Purlls | Percentage of Punils |
|---|---------------------------------|--|
| None 1-2 3-4 5-6 7-8 | 5% 34 19 7 5 117 | 45 29 16 6 <u>4</u> 100 |
| None 1-2 3-4 5-6 | 35 63 18 117 | 30 54 15 1 100 |

TABLE "E"

DISTRIBUTION OF PERCENTAGE OF PUPILS ACHIEVING VARIOUS LEVELS OF MASTERY OF INSTRUCTIONAL OBJECTIVES

| Percentage of Mastery of Instructional Conjectives (# biterives Achieved) (# Conjectives Achieved) Reading: 90-100% 80-89 % 70-79 % 60-69 % | Number of Pupils 16 3 5 18 14 | Porcentage of Pubils 14 3 4 15 |
|---|--|--|
| 50-59 % 40-49 % 30-39 % 20-29 % 10-19 % 0-9 % | 1 4 3 3 117 | $ \begin{array}{c} 12 \\ 1 \\ 3 \\ 3 \end{array} $ $ \begin{array}{c} 45 \\ \hline 100 \end{array} $ |
| Math: 90-100% 80-89 % 70-79 % 60-69 % 50-59 % 40-49 % 30-39 % 20-29 % 10-19 % | 23 2 6 3.2 17 7 7 6 1 25 117 | 20 1 5 10 15 6 6 5 1 31 100 |

20

The University of the State of New York THE STATE EDUCATION DEPARTMENT Bureau of Urban and Community Programs Evaluation Albany, New York 12234

MAILED INFORMATION REPORT FOR CATEGORICALLY AIDED EDUCATION PROJECTS

SECTION III

1974-75 School Year

Due Date: July 15, 1975 SED Project Number BE Function Number (N.Y.C, only) Project Title Summer 1975 Program for Language and Mearing Impaired Children School District Name __DSEPPS - District 75 School District Address 110 Livingston Street Brooklyn, New York 11201 Name and Title of Person Completing this form: Dr. John A. Michael Evaluator Title 873-7058 212 301 Telephone Number (Area Code) Date this form was completed ____8__/__



| B/E # | 09-61606 | | Math | | | | | ř | l |
|-------|--------------------|----------|-----------|-------------------------------|------------------------|----------|---------|--------------------------------|-------------------------|
| | | | | | | Prii | | | 1.01 |
| | | | · · · | | | <u> </u> | | 10.01 | No. of |
| | (b, 1, 1, 1) | Audio Le | | ung mut dide <u>1</u> / | Subgroup <u>2</u> / | | Patting | Aupils Order Order | Puplis from 0.2.2 |
| | | | | | | 1:1 | 1 | <u> </u> | <u> </u> |
| 1101 | Preoperational | Base-73 | Elem. * | 60912 | Н | 6 | 4 | 44 | 00 |
| 1102 | Whole numbers | " | - 11 | 11 | , | 4 | 5 5 | 2 | 3 |
| 1103 | Fractions | 11 | ! !! | , 11 | 1 1f | 6 | 4 | 4 | 0 |
| 1104 | Decimals | 11 | 11 | H | 11 | 3 | 5 | 4 | 1 |
| 1.107 | Addition | †† |) n | . " | . 11 | 2 | 1 | 1 | 0 |
| 1108 | Subtraction | 11 | 11 | 11 | 11 | 0 | 3 | 2 | 11 |
| 1602 | Empty set | 11 | п | 11 | 11 | 0 | 1 | 11 | _0 |
| 1101 | Preoperational | ń | j , 11 | 60913 | 11 | 26 | 12 | 5 | 7 |
| 1102 | Whole numbers | - 11 | 11 . | · | 11 | 19 | 18 | 5 | 13 |
| 1103 | Fractions | 11 | 11 | 11 | 11 | 29 | 8 | 7 | 1 |
| 1104 | Decimals | 11 | : 11 | 11 | 11 / | 29 | : 6 | 4 | 2 |
| 1105 | . Negative numbers | 11 | 11 | 11 | 11 | ! 24 | 15 | 12 | 3 |
| 1106 | Real number system | 11 | " | н | 11 | 21 | 11 | 9 | 2 |
| 1107 | Addition | 11 | 11 | " | " | 27 | 5 | | 55 |

^{*/} The test owners recommend the use of the 1973 version of BASE for the elementary years.

| B/E #09-61606 | | | Math : X-2' | | | | | | |
|---------------|---------------------|--------------|---|--|--|---------|--------|---|--------------------------|
| | 1 | | 1 | | , | Pr. t | | $\frac{1}{120}$ $\frac{1}{120}$ $\frac{1}{120}$ | 10.40 10.45 |
| | | inger in ter | | Composited of the Composite of the Compo | 8.1 grap | Partia, | ing s | ingils ingils inch | Pipila 1005 C.1. 2 |
| 1108 | Subtraction | . Base-73 | Elem.* | 60913 | Н | 26 | 6 | 0 | 6 |
| 1109 | Multiplication |) | ; !! | 11 | н | 30 | 10 | 7 | 3 |
| _1110 | Division | 11 | 11 | | ; ; • • • • • • • • • • • • • • • • • • | 10 | 13 | 8 | 5 |
| 1111 | Relations | , H | 1 11 | | tt | 26 | 16 | 9 | 7 |
| 1112 | Numeration | 11 | | 11 | " | 26 | 8 | 0 | 8 |
| _1113 | Sentences | ! ! | <u> </u> | ! | i 11 | 21 | | 44 | 8 |
| 1114 | Theory | 11 | | 11 | " | 26 | 1 6 | 0 | 6 |
| 1115 | Estimation | 11 | 11 | <u> </u> | | 27 | 3 | 0 | 3 |
| 1116 | Percent | н | 11 | : ; | " | 3 | 0 | 0 | 0 |
| 1117 | Ocher | 11 , | ! !! | | | 35 | 5 | 0 | 5 |
| 1201 | Points | 11 | in | 1 | | 7 | : 9 | 8 | 1 |
| 1202 | · Parallel lines | 11 | , <u>, , , , , , , , , , , , , , , , , , </u> | 11 | <u></u> | 24 - | 15 | 9 | 6 |
| 1301, | i Non-standard | | | 1 " | <u></u> | 14 | 4 | 0 | 4 |
| 1302 | English | 1 | _ " _ " | ! | 1 11 | 24 | 16 | 8 | 8 |

 $[\]frac{2}{2}$ / The test owners recommend the use of the 1973 version of BASE for the elementary years.

21

| B/E #09-61606 | | | Math | | | | | | |
|---------------|---------------------------------------|--|----------|-------------------------|--|----------|------------------------|----------------|-------------------------|
| | وسنت مصند سو رووسو رييو اوران سواله ا | and the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section in the second section is a second section of the second section of the second section is a second section of the second section of the second section of the second section of the section of th | | | 1 | 10 mg/s | . (1) . (1) (1) (1) | . P - e : | in t |
| | iminate til seller Organistis | 7 | | , a proposition (C. 2). | \$ \$ \tau_{\text{s}} \tau_{\tex | 144.11; | refile. | Posits From | lumils tron (A. 2 |
| 1303 | Metric | Base-73 | Elem.* | 60913 | Н | 24 | 14 | 5 | 9 |
| 1304 | Temperature | 11 | . 11 | H | 11 | 19 | 17 | 2 | 15 |
| 1305 | Monetary | ! !! | 11 | . 11 | 1 11 | 11 | 2 | 0 | 2 |
| 1401 | Math operations | 11 | 11 | | 11 | . 4 | 37 | 15 | 22 |
| 1402 | Geometry | 11 | 11 | 11 | 11 11 | 1_33 | 12 | 4 | 88 |
| 1601 | Sets | 11 | 11 | " | <u> </u> | 26 | 3 | | 3 |
| 1602 | Empty set | 11 | . 11 | <u> "</u> | 11 | 20 | 10 | 11 | 9 |
| 1801 | Logical statement | \$ " | 11 | | | 4 | 25 | . 5 | 20 |
| 1901 | Problem analysis | 11 | . " | 11 | | 25 | . 8 | 44 | 44 |
| | | | | | | <u> </u> | , | |] |
| | | | | <u> </u> | | | | | |
| | | | <u> </u> | | <u> </u> | | | | <u> </u> |
| | | | | <u> </u> | | <u> </u> | | | 1 |
| | | | | | | <u> </u> | | <u> </u> | <u> </u> |

 $[\]star$ / The test owners recommend the use of the 1973 version of BASE for the elementary years,

| | | Reading R-1 | | | | | | | | |
|---------------|--|-------------|-------|---------------------------|------------------------|---|---------|--------------------|---------------|--|
| B/E 09 | 9-61606 | Reduction | | | | Prot | | Frank | | |
| £* , | Today this tell | n plisten | Level | Composent Code Code | აინკუთან <u>2</u> / | | Filling | Pupils From Col. 2 | y Nove Ct | |
| | 1 | Croft-72 | lip! | 60812 | Н | 0 | 13 | 9 | 4 | |
| 2101 2102 | Letter recognition. Initial consonants | | н | | 11 | 0 | . 9 | 5 | 4 | |
| 2103 | Medial consonants | 11 | " | 11 | 11 | 0 | 5 | 3 | 2 | |
| 2104 | Final consonants | | н | | <u>i</u> <u>n</u> | 0 | 3 | 2 | 1 2 | |
| 2105 | Blends | 11 | 11 | 11 | " | <u> </u> | 13 | 11 | 2 | |
| _2401_ | Fantasy | 11 | 11 . | 11 | " | 1 0 | 12 | 8 | 4 | |
| | Inferences | 11 | | 11 | 11 | 0 | 13 | 11 | 2 | |
| 2404 | | 11 | 11. | 1 11 | 11 | 0 | ; 11 | 1 | 10 | |
| 2405_ 2406 | Main_ideas | 11 | 11 | 11 | 1 11 | 0 | 1 | 1 | 0 | |
| 2101 | i · | 11 | | 60813 | 11 | 59 | 33 | 19 | 14 | |
| 2102_ | Initial consonants | " | 1 11 | " | 11 | 31 | 50 | 25 | 25 | |
| 2103 | Medial consonants | 11 | | " | 11 | <u> 11 </u> | 23 | | 17 0 | |
| 2104 | Final consonants | " | | | | _!0 | | | | |

| B/E #09-61606 | | | | | R-2 | | | | |
|---------------|--|--|----------|---|----------|----------|-------------------|-----------------|------------------|
| | | | | din g | ! | P: - | | | t: t |
| | : | | | | ; | | <u>Proportion</u> | Donale | No. of Populs |
| (| | £ 1.20 . | | $\begin{array}{ccc} f & G & f_{1} & \text{obstate} \\ & G & \text{de} \\ & & \underline{f} \end{array}$ | | | lailing | iden Idel. 2 | from Cal. 2 |
| | ا ما دانستاند از معنا بعد شاع با باز را در را بسوسا | | | | <u> </u> | . () | <u> </u> | 1 | 1 11 1112 |
| 2401 | Fantasy | Croft-72 | iipii. | 60813 | <u> </u> | 25 | 45 | 26 | 19 |
| 2402 | Classifying | الله المستحديد السراء والمستحديد السراء والمستحد المستحد المستحد المستحد المستحد المستحد المستحد المستحد المستحد | | 1, | 11 | 27 | 8 | 0 | 8 |
| 2403 | Inferences | H | tt | | " | 9 | 46 | 16 | 30 |
| 2404 | Facts | 11 | <u> </u> | 11 | i ti | 45 | 40 | 23 | 17 |
| 2405 | Follow directions | 11 | 11 | 10 | 11 | 6 | 16 | 0 . | 16 |
| | | | | | | ! | | | |
| | | | | 1 | <u> </u> | | : | | |
| | | | | | | | <u> </u> | <u> </u> | |
| | | | 1 | | | | , | | |
| | ! | | ! | : | | | <u>:</u> | | |
| | | | | i | | <u> </u> | | <u> </u> | |
| | | 1 | | | | ! | | <u> </u> | <u> </u> |
| | | | Ī | | | | | - | |
| | <u> </u> | , | | | | İ | | | |

B/E 709-61606

| 32. | Program Abstract: Please provide an abstract of your project, including aspects of the project which account for highly positive results. Provide a summary of the findings in relation to the objectives, as well as a description of the pedagogical methodology employed. |
|-------------|--|
| | |
| 33 . | Date activities began $\frac{7/1/75}{Mo. Day Yr.}$ Date activities will terminate $\frac{8/8/75}{Mo. Day Yr.}$ |
| 34. | Project time span School More than (check one): 1 Year Year 2 X Summer 3 12 Mos. 4 1 year |
| 35. | Project is: $1 $ New $2 \underline{ x} $ Resubmitted $3 $ Continuation (Title III only) |
| | A. If project is resubmitted, please indicate number of years operated: |
| | 2 years 4 years |
| | $ \overline{X} $ 5 or more years |



. OFFICE OF EDUCATIONAL EVALUATION - DATA LOSS FORM (attach to MIR, item #30) Function # 09-61606

In this table enter all path Loss information. Between MIR, item #30 and this form, all participants in each activity must be accounted for. The component and activity codes used in completion of item #30 should be used here so that the two tables match. See definitions below table for further instructions.

| Component Code | | | | | Activity | | | (1) Group I.D. | (2) Test Used | (3) Total N | (4) Number Tested/ | (5) Participants Not Tested/ | | (6) Reasons why students were not tested, or if tested, were not analyzed | |
|-------------------|---|---|---|-----|----------|---|---|----------------------|---------------------|-------------------|--------------------------|------------------------------------|--|---|-------------------|
| Code | | | | | Code | | | 1,0, | 0000 | Analyza | | ' i | | | Number/ Reason |
| | , | | İ | | | | | | | | | | | Present fewer than 7 days | 1 |
| 6 | 0 | 8 | 1 | 2 | 7 | 2 | Ö | К | Croft- 72 | 14 | 13 | 1 | | , | |
| | | | | | | | | | , | | | | | Present fewer than 7 days | 11 |
| 6 | 0 | 9 | 1 | - 2 | 7 | 2 | 0 | К | Base- | 14 | 13 | 1 | | x | |
| | | | | | | | | | Croft- | | | | | Present fewer than 7 days | 7 |
| 6 | 0 | 8 | 1 | 3 | 7 | 2 | σ | 13 | 72 | 111 | 104 | 7 | | - | |
| | - | | | | | | | | | , | | | | Present fewer than 7 days | 7 |
| 6 | 0 | 9 | 1 | 3 | 7 | 2 | 0 | 13 | Base- | 111 | 104 | 7 | | | |
| | - | | | | , | | | | | | | | | | |
| | | | | | | | | | | | | | | · · | ., |

(1) Identify the participants by specific grade level (e.g., grade 3, grade 9). Where several grades are combined, enter the last two digits of the component code.

(2) Identify the test used and year of publication (MAT-70, SDAT-74, etc.).

(3) Number of participants in the activity.

(4) Number of participants included in the pre and posttest calculations found on item#30.

(5) Number and percent of participants not tested and/or not analyzed on item#30.

(6) Specify all reasons why students were not tested and/or analyzed. For each reason specified, provide a separate number count. If any further documentation is available, please attach to this form. If further space is needed to specify and explain data loss, attach additional pages to this form.

